

Please **amend** Claim 13 to read as follows:

13. A composition comprising a chimeric protein bound to a material comprising an active agent, in which the chimeric protein comprises a sequence selected from the group consisting ZElan144 (SEQ ID NO:1), ZElan145 (SEQ ID NO:2) or ZElan146 (SEQ ID NO:3) or a binding portion thereof fused via a covalent bond to an amino acid sequence of a second protein, in which the active agent is of value in the treatment of a mammalian disease or disorder.

Remarks

Per a conversation with Examiner Robinson on September 7, 2001, it is the undersigned's understanding that the only response needed to the Communication of August 10, 2001 was the insertion of the Sequence ID numbers by amendment.

In view of the foregoing, it is respectfully submitted that all of the claims in this application are allowable and such favorable action is respectfully requested.

Respectfully submitted,

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE SPECIFICATION**

**Table 1, Page 19 is amended as follows:**

**Table 1**

| <b>Name</b> | <b>Description</b>                          | <b>Sequence</b>                              |
|-------------|---|--|
| ZElan144    | PAX2 15 mer fragment-D form retroinversion  | K(dns)-rtrlrrnhsshkant<br>(SEQ ID NO:1)      |
| ZElan145    | P31 16 mer fragment- D form retroinversion  | K(dns)-gphrrgrpnssskrt<br>(SEQ ID NO:2)      |
| ZElan146    | HAX42 14 mer fragment-D form retroinversion | K(dns)-gtsngngccnydgp<br>(SEQ ID NO:3)       |
| ZElan129    | PAX2 15 mer fragment                        | K(dns)-<br>TNAKHSSHNRRRLRTR<br>(SEQ ID NO:4) |
| ZElan031    | P31 16 mer fragment                         | K(dns)-<br>TRKSSRSNPRGRRHPG<br>(SEQ ID NO:5) |
| ZElan091    | HAX42 14 mer fragment                       | K(dns)-<br>PGDYNCCGNGNSTG<br>(SEQ ID NO:6)   |

**The paragraph at page 20, line 22 to page 21, line 2, is amended only as regards underlined material as follows:**

-- Elan021, full length HAX42 [K(dns)-

SDHALGTNLRSDNAKEPGDYNCCGNGNSTGRKVFNRRRPSAIP] (SEQ ID NO:8)

was given the arbitrary value of 1.00 for binding to P100 at a given peptide

concentration determined from the signal-to-noise ratio data. Table 2 shows the results

of P100 assays with the HAX42 related peptides ZElan021, Zelan091 and ZElan146.

Assay number 1 was at 20 µg/ml; 2 and 3 were at 50 µg/ml; and 4 through 8 were at 25 µg/ml. The results for the retro-inverted form, Zelan 146 show reasonable binding compared to the HAX42 fragment Zelan091 and that the activity of the GIT targeting agent was not eliminated when converted to its retro-inverted form. - -

The paragraph at lines 5-11 on Page 21 is amended only as regards underlined material as follows:

--K<sub>D</sub> values, or the concentration of the peptide required to reach half maximal binding to Caco-2 P100 fractions, are given in Table 3 for ZElan021, full length HAX42, [K(dns)-SDHALGTNLRSDNAKEPGDYNCCGNGNSTGRKVFNRRRPSAIP] (SEQ ID NO:8), HAX42 fragment ZElan091, and the retro-inverted form of this fragment, ZElan146 as well as for ZElan018, full length PAX2, [K(dns)-STPPSREAYSRPYSVDS DSDTNAKHSSHNRRLRTRSRPNG] (SEQ ID NO:7), PAX2 fragment ZElan129, and the retro-inverted form of this fragment, ZElan144.--

Table 3, Page 21 is amended as follows:

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**Table 3**

| Name     | Sequence  | K <sub>D</sub><br>(µmol) |
|----------|---|--------------------------|
| ZElan018 | K(dns)-STPPSREAYSRPYSVDS DSDTNAKHSSHNRRLRTRSRPNG ( <u>SEQ ID NO:7</u> )   | >50.0                    |
| ZElan129 | K(dns)-TNAKHSSHNRRLRTR ( <u>SEQ ID NO:4</u> )                             | 29.6                     |
| ZElan144 | K(dns)-rtrlrnhsshkant ( <u>SEQ ID NO:1</u> )                              | 28.8                     |
| ZElan021 | K(dns)-SDHALGTNLRSDNAKEPGDYNCCGNGNSTGRKVFNRRRPSAIP ( <u>SEQ ID NO:8</u> ) | 6.7                      |

|          |                                     |       |
|----------|-------------------------------------|-------|
| ZElan091 | K(dns)-PGDYNCCGNGNSTG (SEQ ID NO:6) | 0.75  |
| ZElan146 | K(dns)-gtsngngccnydgp (SEQ ID NO:3) | 21.65 |

# **IN THE CLAIMS:**

**Claim 2** is amended as follows:

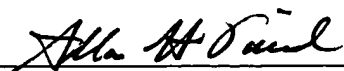
-- 2 (Amended). The retro-inverted peptide of claim 1, in which the peptide comprises an amino acid sequence selected from the group consisting of ZElan144 (SEQ ID NO:1), ZElan145 (SEQ ID NO:2) or ZElan146 (SEQ ID NO:3) or a binding portion thereof.--

**Claim 13** is amended as follows:

-- 13 (Amended). A composition comprising a chimeric protein bound to a material comprising an active agent, in which the chimeric protein comprises a sequence selected from the group consisting ZElan144 (SEQ ID NO:1), ZElan145 (SEQ ID NO:2) or ZElan146 (SEQ ID NO:3) or a binding portion thereof fused via a covalent bond to an amino acid sequence of a second protein, in which the active agent is of value in the treatment of a mammalian disease or disorder.--

## **CERTIFICATE OF MAILING**

I hereby certify that the foregoing AMENDMENT and a Transmittal Letter re Application Serial No. 09/443,986 are being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Commissioner for Patents, Attn: Box Non-Fee Amendment, Washington, D.C. 20231 on this 5<sup>TH</sup> day of October, 2001.

  
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